

App. No. 09/938,443  
Amendment A  
Page 2

Amendments to the Claims

Claim 1 (Original): A computer implemented method for remotely configuring a Virtual Private Network (VPN) between a client-side system and a server-side system, comprising:

receiving data indicative of a selected server-side system and a selected client-side system between which a VPN is to be established;

automatically determining security setting for said client-side system based at least partially on said data; and

automatically transmitting VPN configuration details to said client-side system, where said VPN configuration details include said security settings,

such that in use said client-side system is automatically configured with said VPN configuration details to establish a secure VPN tunnel between said client-side system and said server-side system.

Claim 2 (Original): The computer implemented method of claim 1, wherein said receiving comprises obtaining said data indicative of a selected server in said server-side system and a selected user of said client-side system from a system administrator, via an electronic network.

Claim 3 (Original): The computer implemented method of claim 1, wherein said determining comprises creating a public and private key.

App. No. 09/938,443  
Amendment A  
Page 3

Claim 4 (Original): The computer implemented method of claim 1, wherein said determining comprises establishing a Digital Certificate.

Claim 5 (Original): The computer implemented method of claim 1, further comprising:  
    automatically ascertaining further security settings for said server-side system;  
    automatically transmitting VPN configuration details to a concentrator within said server-side system, where said VPN configuration details include said further security settings.

Claim 6 (Original): The computer implemented method of claim 1, further comprising:  
    automatically ascertaining further security settings for said server-side system; and  
    automatically transmitting VPN configuration details to a firewall within said server-side system, where said VPN configuration details include said further security settings.

Claim 7 (Original): The computer implemented method of claim 1, wherein said transmitting comprises communicating said VPN configuration details to a modem within said client-side system.

Claim 8 (Original): The computer implemented method of claim 1, wherein said transmitting comprises communicating said VPN configuration details to a firewall on a modem within said client-side system.

App. No. 09/938,443  
Amendment A  
Page 4

Claim 9 (Currently amended): The computer implemented method of claim 1, further comprising the step, after said determining step, of: storing said data indicative of a selected server-side system and a selected client-side system between which a VPN is to be established and said security settings.

Claim 10 (Currently amended): The computer implemented method of claim 1, further comprising the steps, after said automatically transmitting step, of:

receiving a password from said client-side system; and  
authenticating said password.

Claim 11 (Original): The computer implemented method of claim 1, further comprising:

establishing a Virtual Private Network tunnel between said client-side system and said server-side system; and  
verifying that said tunnel is operational.

Claim 12 (Original): The computer implemented method of claim 1, further comprising configuring a login page on a modem within said client-side system.

Claim 13 (Original): A computer program product for use in conjunction with a computer system for remotely configuring a Virtual Private Network (VPN) between a client-side system and a server-side system, the computer program product comprising a computer readable storage and a computer program stored therein, the computer program comprising:

App. No. 09/938,443  
Amendment A  
Page 5

instructions for receiving data indicative of a selected server-side system and a selected client-side system between which a VPN is to be established;

instructions for automatically determining security settings for said client-side system based at least partially on said data; and

instructions for automatically transmitting VPN configuration details to said client-side system, where said VPN configuration details include said security settings.

Claim 14 (Original): The computer program product of claim 13, wherein said instructions for receiving further comprise instructions for obtaining said data indicative of a selected server in said server-side system and a selected user of said client-side system from a system administrator, via an electronic network.

Claim 15 (Original): The computer program product of claim 13, wherein said instructions for determining further comprise instructions for creating a public and private key.

Claim 16 (Original): The computer program product of claim 13, wherein said instructions for determining further comprise instructions for establishing a Digital Certificate.

Claim 17 (Original): The computer program product of claim 13, wherein said computer program further comprises:

instructions for automatically ascertaining further security settings for said server-side system; and

App. No. 09/938,443  
Amendment A  
Page 6

instructions for automatically transmitting VPN configuration details to a concentrator within said server-side system, where said VPN configuration details include said further security settings.

Claim 18 (Original): A computer implemented method for remotely configuring a Virtual Private Network (VPN) between a client-side system and a server-side system, comprising:

receiving at a modem within said client-side system, VPN configuration details from a service provider system, where said VPN configuration details include security settings for establishing a VPN with a remote server-side system; and

automatically configuring said modem, with said VPN configuration details,

such that in use a secure VPN tunnel can be established between said client-side system and said server-side system.

Claim 19 (Original): The computer implemented method of claim 18, wherein said configuring further comprises setting-up a firewall on said modem with said modem with said security settings.

Claim 20 (Original): The computer implemented method of claim 18, further comprising:

receiving a password from said client-side system; and authenticating said password.

Claim 21 (Original): The computer implemented method of claim 20, wherein said authenticating comprises:

App. No. 09/938,443  
Amendment A  
Page 7

sending said password to an authentication server  
within said server-side system;  
receiving authentication from said authentication  
server.

Claim 22 (Original): A remotely configurable Virtual  
Private Network (VPN) comprising:

- a client-side network comprising:
  - a modem that communicates with the internet; and
  - at least one client computer electrically coupled  
to said modem;
- a server-side network comprising:
  - a VPN concentrator that communicates with the  
internet; and
  - at least one server electrically coupled to said  
VPN concentrator; and
- a service provide network comprising:
  - a security generator for automatically determining  
security settings used to secure VPN communication between said  
client computer and said server;
  - a VPN synchronizer for automatically configuring  
said modem with said security settings; and
  - a modem synchronizer for automatically configuring  
said modem with said security settings.

Claim 23 (Original): The remotely configurable Virtual  
Private Network (VPN) of claim 22, wherein said modem is a DSL  
(Digital Subscriber Line) modem.

App. No. 09/938,443  
Amendment A  
Page 8

Claim 24 (Original): The remotely configurable Virtual Private Network (VPN) of claim 18, wherein said server-side network further comprises:

- a router configured to electrically couple to the internet;
- a firewall electrically coupled to said router;
- an authentication server for authenticating a user of said client computer;
- a file server;
- a proxy server; and
- a DNS (Domain Name System) server.

Claim 25 (Original): The remotely configurable Virtual Private Network (VPN) of claim 22, wherein said server-side network further comprises an authentication server for authenticating a user of said client computer.

Claim 26 (Original): The remotely configurable Virtual Private Network (VPN) of claim 22, wherein said service provider network further comprises:

- a VPN provider;
- a DNS (Domain Name System) server, and
- an HTTP server.

Claim 27 (Original): The remotely configurable Virtual Private Network (VPN) of claim 22, wherein said security generator is a PKI (Public Key Infrastructure) Synchronizer.